VOLUME 17, 1972
CONTENTS

Number 1 — issued November 1972

Oren, O. H., Results of the UNDP (SF)/FAO Regional Fisheries Survey in West Africa. Report No. 2. Preliminary Note on Dissolved Oxygen in the Canary Current. 1

Oren, O. H., Results of the UNDP (SF)/FAO Regional Fisheries Survey in West Africa. Report No. 3. Silicates in the Canary Current Area. 4

Fagetti, E., Bathymetric Distribution of Chaetognaths in the South Eastern Pacific Ocean. 7

Dehadrai, P. V. and R. M. S. Bhargava, Distribution of Chlorophyll, Carotenoids and Phytoplankton in Relation to Certain Environmental Factors along the Central West Coast of India. 30

Ansell, A. D., P. Sivadas, B. Narayanan, V. N. Sankaranarayanan and A. Trevallion, The Ecology of Two Sandy Beaches in South West India. I. Seasonal Changes in Physical and Chemical Factors, and in the Macrofauna. 38

Nival, P., S. Nival et I. Palazzoli, Données sur la Respiration de Différents Organismes Communs dans le Plancton de Villefranche-sur-Mer. [Data on the Respiration of Different Organisms Common in the Plankton of Villefranche-sur-Mer]. 63

Zander, C. D. und I. Bartsch, *In situ* Beziehungen zwischen Nahrungsangebot und aufgenommener Nahrung bei 5 *Blennius*-Arten (Pisces) des Mittelmeeres. [*In-situ* Relations Between Food Supply and Food Consumption in 5 *Blennius* Species (Pisces) from the Mediterranean Sea]. 77

Sen Gupta, R., Photosynthetic Production and its Regulating Factors in the Baltic Sea. 82

Number 2 — issued November 1972

Belbenoit, P. and R. Bauer, Video Recordings of Prey Capture Behaviour and Associated Electric Organ Discharge of *Torpedo marmorata* (Chondrichthyes). 93

Zafiriou, O., Response of *Asterias vulgaris* to Chemical Stimuli. 100

Mangum, C. P., Temperature Sensitivity of Metabolism in Offshore and Intertidal Onuphid Polychaetes. 108

Bhaud, M., Quelques Données sur le Déterminisme Ecologique de la Reproduction des Annélides Polychètes. [Some Data on the Ecological Determinism of Reproduction in Polychaete Annelids]. 115

Storch, V. and U. Welsch, Ultrastructure and Histochemistry of the Integument of Air-Breathing Polychaetes from Mangrove Swamps of Sumatra. 137

Moore, H. B., An Estimate of Carbonate Production by Macrobenthos in some Tropical, Soft-bottom Communities. 145

Menzies, R. J., Experimental Interbreeding between Geographically Separated Populations of the Marine Wood-Boring Isopod *Limnoria tripunctata* with Preliminary Indications of Hybrid Vigor. 149

Blanc, F. et P. Kerambrun, Essai d'appréciation d'une phénomène d'allométrie chimique dans un univers multivarié. Application à l'étude des populations naturelles de *Sphaeroma hookeri* (Crustacea: Isopoda Flabellifera). [An Attempt to Estimate a Phenomenon of Chemical Allometry, by Means of a Multivariate Model. Application to the Study of the Natural Populations of *Sphaeroma hookeri* (Crustacea: Isopoda Flabellifera)]. 158

Dagg, M. J. and J. L. Littlepage, Relationships Between Growth Rate and RNA, DNA ,Protein and Dry Weight in *Artemia salina* and *Euchaeta elongata*. 162

Smaldon, G., Population Structure and Breeding Biology of *Pisidia longicornis* and *Porcellana platycheles*. 171

Fänge, R., Å. Larsson and U. Lidman, Fluids and Jellies of the Acusticolateralis System in Relation to Body Fluids in *Coryphaenoides rupestris* and Other Fishes. 180

Number 3 — issued December 1972

Oren, O. H., Results of the UNDP (SF)/FAO Regional Fisheries Survey in West Africa. Report. No. 4. T/S Relationship in the Canary Current Area. 187

Lee, R. F., R. Sauerheber and G. H. Dobbs, Uptake, Metabolism and Discharge of Polycyclic Aromatic Hydrocarbons by Marine Fish. 201

Lowe, J. I., P. R. Parrish, J. M. Patrick, Jr. and J. Forester, Effects of the Polychlorinated Biphenyl Aroclor® 1254 on the American Oyster *Crassostrea virginica*. 209

Lewis, A. G., P. H. Whitfield and A. Ramnarine, Some Particulate and Soluble Agents Affecting the Relationship between Metal Toxicity and Organism Survival in the Calanoid Copepod *Euchaeta japonica*. 215

Davenport, J., Effects of Size upon Salinity Tolerance and Volume Regulation in the Hermit Crab *Pagurus bernhardus*. 222

Röttger, R., Analyse von Wachstumskurven von *Heterostegina depressa* (Foraminifera: Nummulitidae). [Analysis of Growth Curves of *Heterostegina depressa* (Foraminifera: Nummulitidae)]. 228

Dame, R. F., The Ecological Energies of Growth, Respiration and Assimilation in the Intertidal American Oyster *Crassostrea virginica*. 243

Rafail, S. Z., The Application of a Multiple-Recapture Technique for the Study of some Aspects of Dynamics of Large Fish Populations. 251

Zelickman, E. A., Distribution and Ecology of the Pelagic Hydromedusae, Siphonophores and Ctenophores of the Barents Sea, Based on Perennial Plankton Collections. 256

Zelickman, E. A. and A. N. Golovkin, Composition, Structure and Productivity of Neritic Plankton Communities near the Bird Colonies of the Northern Shores of Novaya Zemlya. 265

Number 4 — issued December 1972

Karplus, I., M. Tsurnamal and R. Szlep, Analysis of the Mutual Attraction in the Association of the Fish *Cryptocentrus cryptocentrus* (Gobiidae) and the Shrimp *Alpheus djiboutenis* (Alpheidae). 275

Veerannan, K. M., Respiratory Metabolism of Crabs from Marine and Estuarine Habitats. I. *Scylla serrata*. 284

Siebers, D., C. Lucu, K.-R. Sperling and K. Eberlein, Kinetics of Osmoregulation in the Crab *Carcinus maenas*. 291

Davenport, J., Study of the Importance of the Soft Abdomen of the Hermit Crab *Pagurus bernhardus* in Minimising the Mechanical Effects of Osmotic Uptake of Water. 304

Davenport, J., Buoyancy in *Porcellana platycheles*. 308

Ansell, A. D., P. Sivadas, B. Narayanan and A. Trevallion, The Ecology of Two Sandy Beaches in South West India. II. Notes on *Emerita holthuisi*. 311

Ansell, A. D., P. Sivadas, B. Narayanan and A. Trevallion, The Ecology of Two Sandy Beaches in South West India. III. Observations on the Population of *Donax incarnatus* and *D. spiculum* 318

Underwood, A. J., Observations on the Reproductive Cycles of *Monodonta lineata*, *Gibbula umbilicalis* and *G. cineraria*. 333

Underwood, A. J., Spawning, Larval Development and Settlement Behaviour of *Gibbula cineraria* (Gastropoda: Prosobranchia) with a Reappraisal of torsion in Gastropods. 341

Myers, A. C., Tube-Worm-Sediment Relationships of *Diopatra cuprea* (Polychaeta: Onuphidae). 350

Pishelson, L., Histology and Ultrastructure of the Skin of *Lepadichthys lineatus* (Gobiesocidae: Teleostei). 357